

PROJECT:
Food Plant - Waterproof Liner

LOCATION:
Fall River, MA

OWNER:
Blount Fine Foods

APPLICATOR:
Delphi Engineering

COATING SYSTEM:
Polyshield HT™ SL Polyurea
over woven Geotextile fabric

TOTAL AREA:
1,800 square feet

COMPLETION DATE:
July 2010

PROBLEM:

A seafood processing plant was expanding its production capabilities to accommodate a new contract with a national seafood distribution chain. The plant was adding a large water chiller, capable of cooling bags of soup as they rolled off of the production line. The construction timeline was aggressive to meet the new production opportunity. Plant engineers were looking for a secondary containment liner solution that could be installed over the new concrete foundation before the concrete reached full cure.

SOLUTION:

HT™ SL polyurea is a spray-applied, thermoset, elastomer coating that offers zero VOCs, 100% solids, and has an extremely fast cure schedule. The project was specified with a geotextile fabric and HT™ SL polyurea coating system. The installation of the waterproof liner was accelerated by mechanically fastening the geotextile fabric to the concrete, and bonding the polyurea to the geotextile.

This step combined with the coating's rapid curing property, would allow the facility to be quickly returned to service.

A concrete nail gun was used to drive the fasteners through the metal strips placed over the geotextile into the concrete. The HT™ SL polyurea, elastomeric coating was sprayed to 100 mils thick. Slit samples were taken every 100 s.f. to verify proper mil thickness of the coating.

RESULTS:

The purpose of the lining system was to have a 100% seamless waterproof membrane; water will constantly run from the chiller to the holding area and back to the chiller. The plant engineers were grateful to have a waterproof liner solution available to meet their project timeline. The polyurea/geotextile system was the only system available that could be applied over the new concrete, meet indoor air quality requirements during application, and provide a quick cure schedule.

